ARMY MEDICINE
Serving To Heal...Honored To Serve

Yes, I use YOUR data!

One Analyst's Quest for Data Quality

Kenneth R. Kovats
MEDCOM PAE

"All models are wrong. Some are useful..."

14 November 2012

FOUO

This briefing is brought to you by the number…

8

The quadruple aim…

How are your data used?

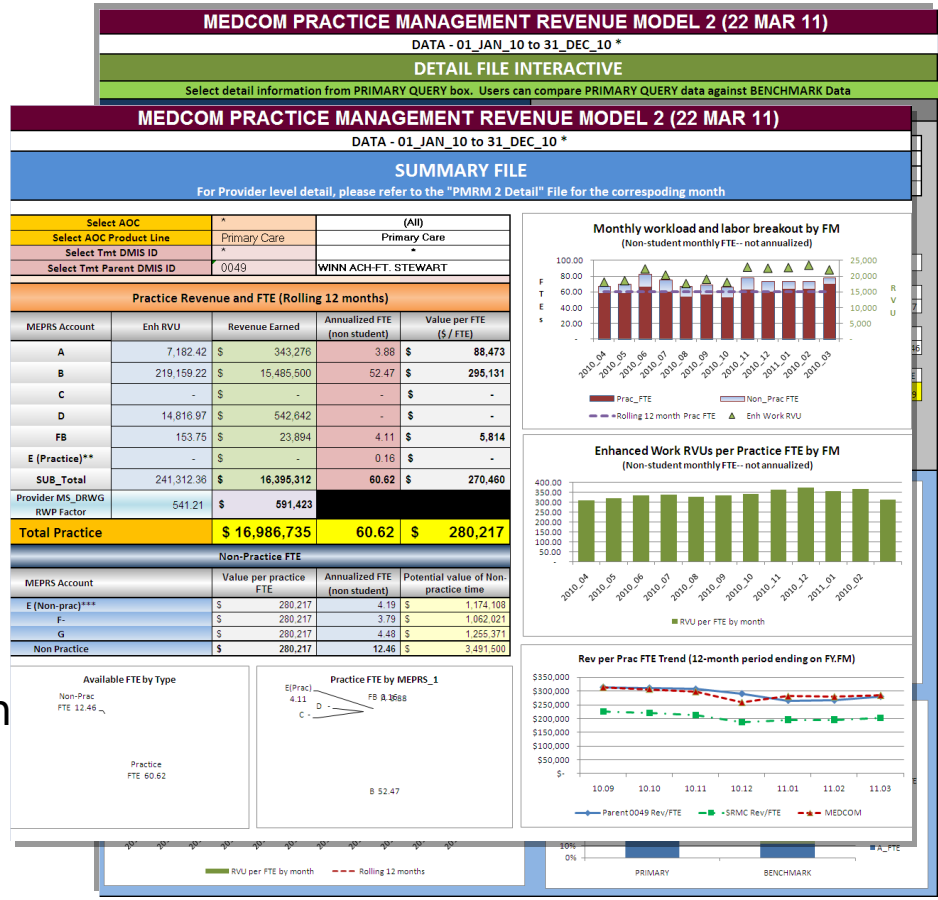
- Analytical Tools
  - Practice Management Revenue Model
  - Administrative Cost Efficiency Metric

- Business Case Analyses
- Manpower studies
- Human Capital Distribution Program
- Military Construction Projects (MILCON)

- Any MAJOR decision by Senior Leadership!

PRACTICE MANAGEMENT REVENUE MODEL

- Provides enhanced analysis of the medical practice.
- Expanded views of productivity, including ambulatory, inpatient, & administrative components of the practice.
- Workload and labor data now at the INDIVIDUAL PROVIDER level.
- Uses of PMRM
  - MEDCOM Human Capital Distribution Program
  - Data Quality Reviews
  - Incorporate with other MEDCOM analytic tools: ACE, EBSM


MEDCOM PRACTICE MANAGEMENT REVENUE MODEL 2 (22 MAR 11)
DATA - 01_JAN_10 to 31_DEC_10 *
DETAIL FILE INTERACTIVE
Select detail information from PRIMARY QUERY box. Users can compare PRIMARY QUERY data against BENCHMARK Data
MEDCOM PRACTICE MANAGEMENT REVENUE MODEL 2 (22 MAR 11)
DATA - 01_JAN_10 to 31_DEC_10 *
SUMMARY FILE
For Provider level detail, please refer to the "PMRM 2 Detail" File for the correspoding month
Select AOC
Select AOC Product Line
Primary Care
(All)
Primary Care
Select Tmt DMIS ID
Select Tmt Parent DMIS ID
0049
WINN ACH-FT. STEWART
Practice Revenue and FTE (Rolling 12 months)
MEPRS Account
Enh RVU
Revenue Earned
Annualized FTE (non student)
Value per FTE ($ / FTE)
A 7,182.42 $ 343,276 3.88 $ 88,473
B 219,159.22 $ 15,485,500 52.47 $ 295,131
C - $ - - $ -
D 14,816.97 $ 542,642 - $ -
FB 153.75 $ 23,894 4.11 $ 5,814
E (Practice)** - $ - 0.16 $ -
SUB_Total 241,312.36 $ 16,395,312 60.62 $ 270,460
Provider MS_DRWG RWP Factor 541.21 $ 591,423
Total Practice $ 16,986,735 60.62 $ 280,217
Non-Practice FTE
MEPRS Account
Value per practice FTE
Annualized FTE (non student)
Potential value of Non-practice time
E (Non-prac)*** $ 280,217 4.19 $ 1,174,108
F- $ 280,217 3.79 $ 1,062,021
G $ 280,217 4.48 $ 1,255,371
Non Practice $ 280,217 12.46 $ 3,491,500
Monthly workload and labor breakout by FM
(Non-student monthly FTE-- not annualized)
Prac_FTE
Non_Prac FTE
Rolling 12 month Prac FTE
Enh Work RVU
Enhanced Work RVUs per Practice FTE by FM
(Non-student monthly FTE-- not annualized)
RVU per FTE by month
Rev per Prac FTE Trend (12-month period ending on FY.FM)
Parent 0049 Rev/FTE
SRMC Rev/FTE
MEDCOM
Available FTE by Type
Non-Prac FTE 12.46
Practice FTE 60.62
Practice FTE by MEPRS_1
E(Prac) 4.11
FB 0.16
D -
C -
B 52.47
RVU per FTE by month
Rolling 12 months
PRIMARY
BENCHMARK

For the PMRM, a Practice is defined as a group of Providers of the same Provider Specialty

The challenge in measuring productivity…

- Most commonly measured by:
  - Encounters per day
  - B-RVUs/Provider FTE/Day
- What this doesn't tell us:
  - Clinical administrative time
  - Leadership duties (Hospital Commander)
  - Readiness training
  - GME support
  - Inpatient RVUs and time
  - Data quality issues
    - Improper coding of MEPRS-E time (clinical support/admin)
    - Improper coding of MEPRS-A time (inpatient units)
  - Revenue generated by the practice ($$$)

What is a “Practice”?

The “Practice”: AOC Product Line Groupings

PMRM looks at WHO the provider is, NOT

AOC Product Line	AOC	Common name
BH	60U	CHILD PSYCHIATRIST
	60W	PSYCHIATRIST
	66CM8	Beh'r Health Nurse Practioner
	73A	SOCIAL WORK OFFICER
	73B	CLINICIAL PSYCHOLOGY
Derm	60L	DERMATOLOGIST
ENT	60T	OTOLARYNGOLOGIST
ER	62A	EMERGENCY PHYSICIAN
	65DM2	PA - ER
IM Sub	60B	NUCLEAR MEDICAL OFFICER
	60F	PULMONARY DISEASE OFFICER
	60G	GASTROENTEROLOGIST
	60H	CARDIOLOGIST
	60M	ALLERGIST/CLINICAL IMMUNOLOGIST
	60O	PEDS SUB-SPECIALIST
	60V	NEUROLOGIST
	61A	NEPHROLOGIST
	61B	MEDICAL ONCOLOGIST/HEMATOLOGIST
	61C	ENDOCRINOLOGIST
	61D	RHEUMATOLOGIST
	61G	INFECTIOUS DISEASE OFFICER
	61O	THERAPEUTIC RADIOLOGIST
	65C	HOSPITAL DIETICIAN
OB	60J	OBSTETRICIAN & GYNECOLOGIST
	66G8D	NURSE MIDWIFE
Optom	60S	OPHTHALMOLOGIST
	67F	OPTOMETRY OFFICER

AOC Product Line	AOC	Common name
Ortho	61M	ORTHOPEDIC SURGEON
	65A	OCCUPATIONAL THERAPY
	65B	PHYSICAL THERAPY
	65DM1	PA - Orthopedic
	67G	PODIATRIST
PC	60P	PEDIATRICIAN
	61F	INTERNIST
	61H	FAMILY PHYSICIAN
	61N	FLIGHT SURGEON
	65D_	PHYSICIANS ASSISTANT
	65DM3	PA - Aviation
	66P	FAMILY NURSE PRACTITIONER
Surg	61L	GENERAL SURGEON
Surg Sub	60K	UROLOGIST
	61K	THORACIC SURGEON
	61L	PLASTIC SURGEON
	61W	PERIPHERAL VASCULAR SURGEON
	61Z	NEUROSURGEON
Other	60C	PREVENTIVE MEDICINE OFFICER
	60D	OCCUPATIONAL MEDICINE OFFICER
	60N	ANESTHESIOLOGIST
	61P	PHYSIATRIST
	61R	DIAGNOSTIC RADIOGIST
	61U	PATHOLOGIST
	66B	COMMUNITY HEALTH NURSE
	66F	NURSE ANESTHETIST
	67E	PHARMACY OFFICER
	72C	AUDIOLOGIST

PMRM CONCEPTS

PMRM looks at WHO the Provider is, not WHERE the work occurs….

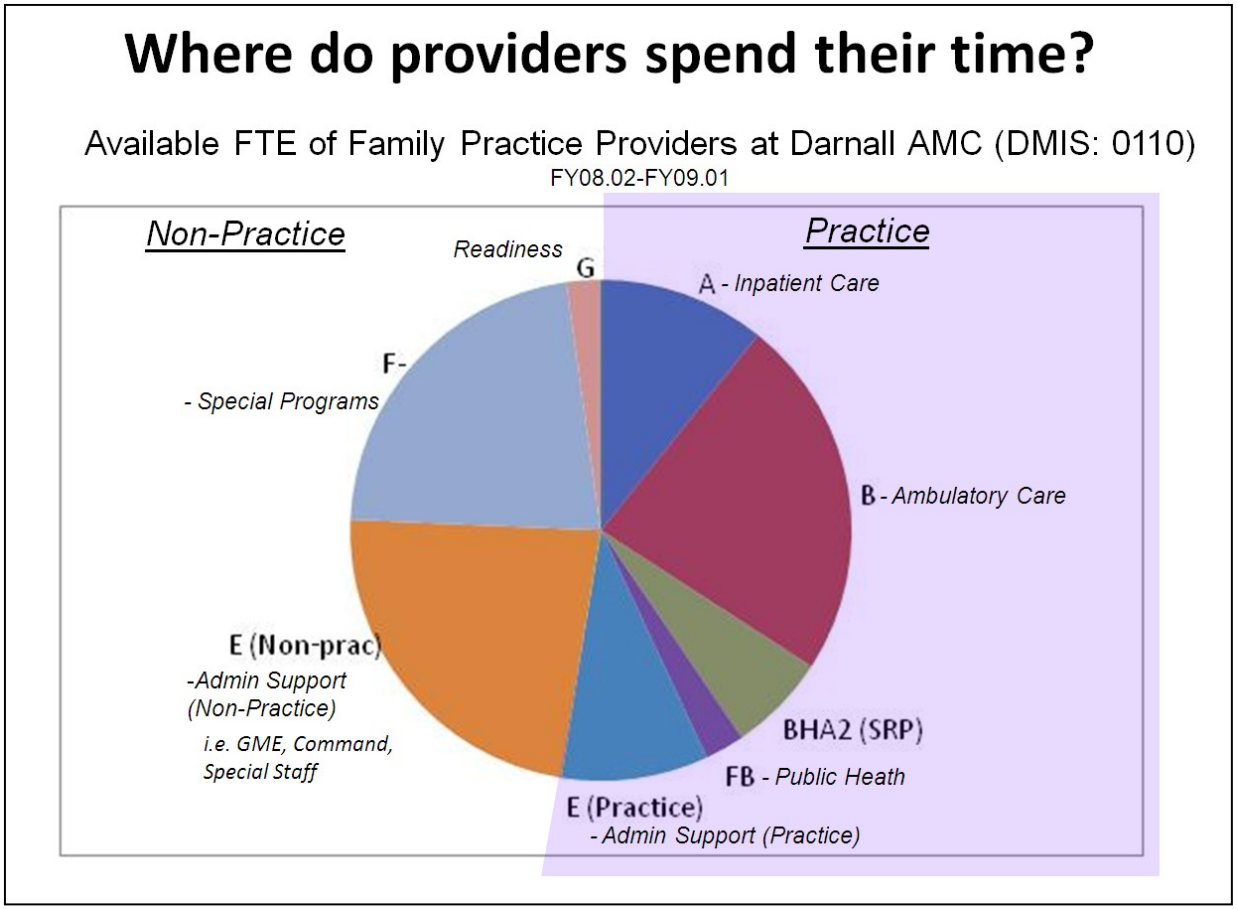
Data summarized at a *rolling 12-month* format.

Revenue per Practice FTE: Key PMRM Metric

Practice Revenue: PPS value* from all ambulatory and inpatient workload

Practice FTE: Annualized Available FTEs documented in MEPRS A,B,C,D, E(Practice), and FB

*PPS values indexed to the San Antonio market rate



Integrates data from CAPER, SIDR, and DMHRSi

PMRM SUMMARY WORKBOOK

MEDCOM PRACTICE MANAGEMENT REVENUE MODEL 2 (17 AUG_12)

DATA - 01_MAY_11 to 30_APR_12 *

SUMMARY FILE

For Provider level detail, please refer to the "PMRM 2 Detail" File for the correspoding month

Type or select AOC, Product Line & DMIS ID here...

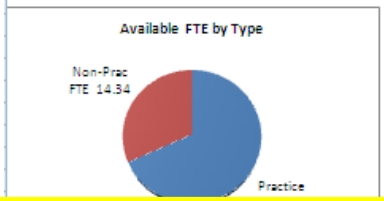
Select AOC	61H	FAMILY PHYSICIAN
Select AOC Product Line	PC	PC
Select Tmt DMIS ID	*	-
Select Tmt Parent DMIS ID	0047	EISENHOVER AMC-FT. GORDON

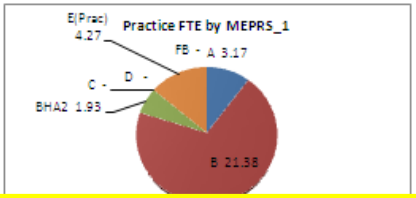
Practice Revenue and FTE (Rolling 12 months)

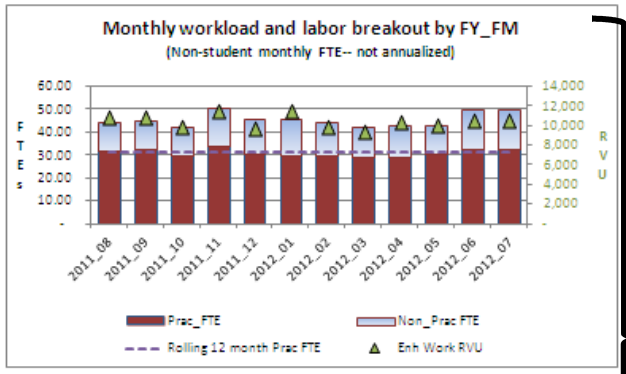
MEPRS Account	Enh Work RVU (Completed CAPER)	PPS Revenue Earned*	Annualized FTE	Value per FTE ($ / FTE)
A	5,537.00	$ 288,790	3.17	$ 91,242
B	111,513.70	$ 9,099,658	21.38	$ 425,707
BHA2 (SRP)	6,841.54	$ 568,121	1.93	$ 293,849
C	-	$ -	-	$ -
D	-	$ -	-	$ -
FB	0.48	$ 3	-	$ -
E (Practice)**	-	$ 41	4.27	$ 10
SUB_Total	123,892.72	$ 9,956,611	30.74	$ 323,870
Provider MS_DRG RVP	813.30	$ 931,594		
Total Practice		$ 10,888,205	30.74	$ 354,173
		MEDCOM Aggregate Value / FTE:		318,455

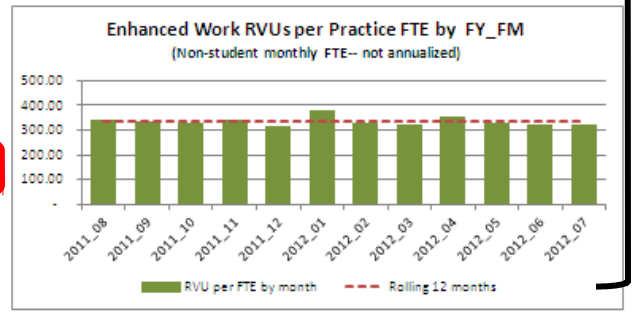
Non-Practice FTE

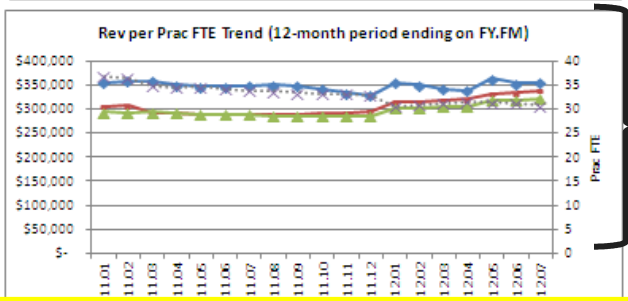
MEPRS Account	Value per practice FTE	Annualized FTE	Potential value of Non-practice time
E (Non-prac)**	$ 354,173	4.27	$ 1,511,872
F-	$ 354,173	5.67	$ 2,007,604
G	$ 354,173	2.70	$ 954,997
Non Practice	$ 354,173	12.63	$ 4,474,473








Enhanced Work RVUs per Practice FTE by FY_FM
(Non-student monthly FTE-- not annualized)
RVU per FTE by month
Rolling 12 months



Select Parent or Tmt DMIS and AOC (Specialty) or Product Line

Breakout of RVU, Workload revenue and Practice FTEs by MEPRS_1 code

Inpt Revenue Contribution (12-15% of RWP PPS value)

Revenue per Practice FTE

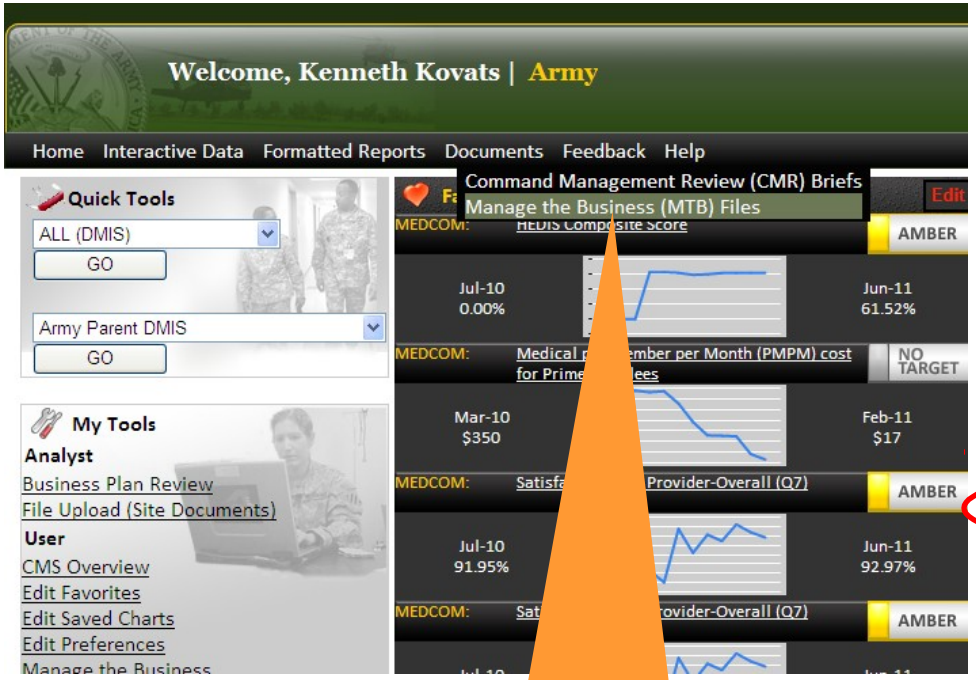
Monthly breakout of FTE (Prac & Non-Prac) and RVUs

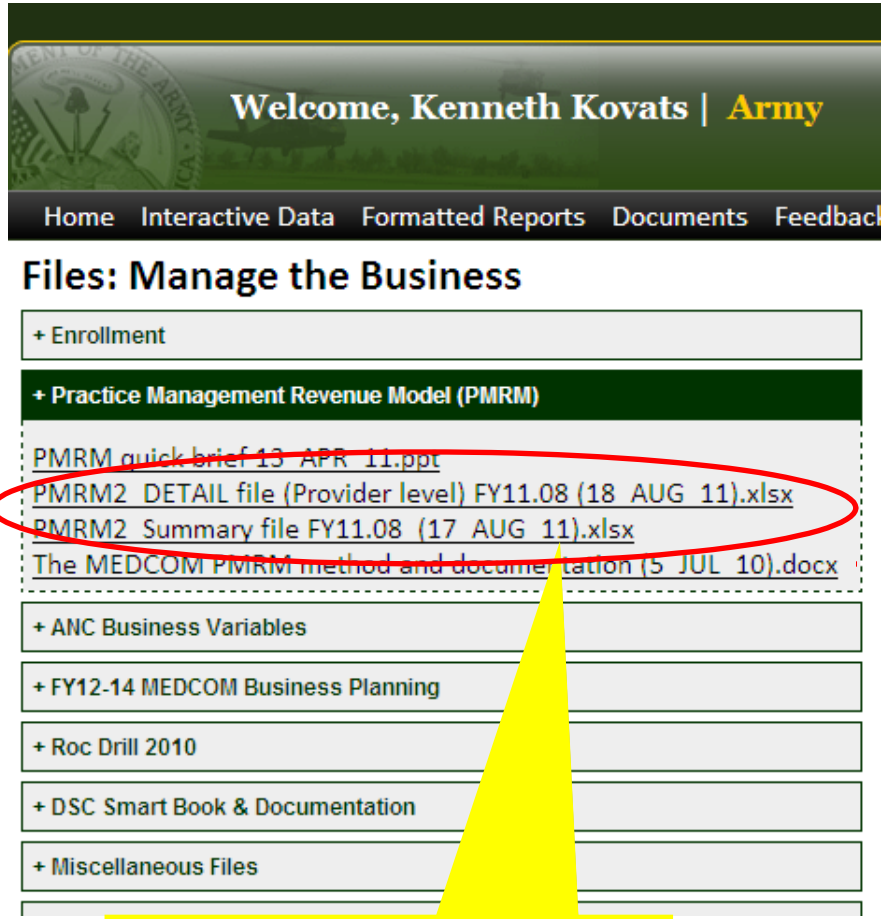
Trend data from previous editions ....

Intern, Resident, and Skill Type 2 Student FTE data are not included in the PMRM "Revenue per Practice FTE" score.

Downloading the PMRM from CMS

https://cms.mods.army.mil/cms/




Welcome, Kenneth Kovats | Army
Home
Interactive Data
Formatted Reports
Documents
Feedback
Files: Manage the Business
+ Enrollment
+ Practice Management Revenue Model (PMRM)
PMRM quick brief 13 APR 11.ppt
PMRM2 DETAIL file (Provider level) FY11.08 (18 AUG 11).xlsx
PMRM2 Summary file FY11.08 (17 AUG 11).xlsx
The MEDCOM PMRM method and documentation (5 JUL 10).docx
+ ANC Business Variables
+ FY12-14 MEDCOM Business Planning
+ Roc Drill 2010
+ DSC Smart Book & Documentation
+ Miscellaneous Files

From CMS main page, click on “Documents”/ ”Manage the Business Files”

Download PMRM file

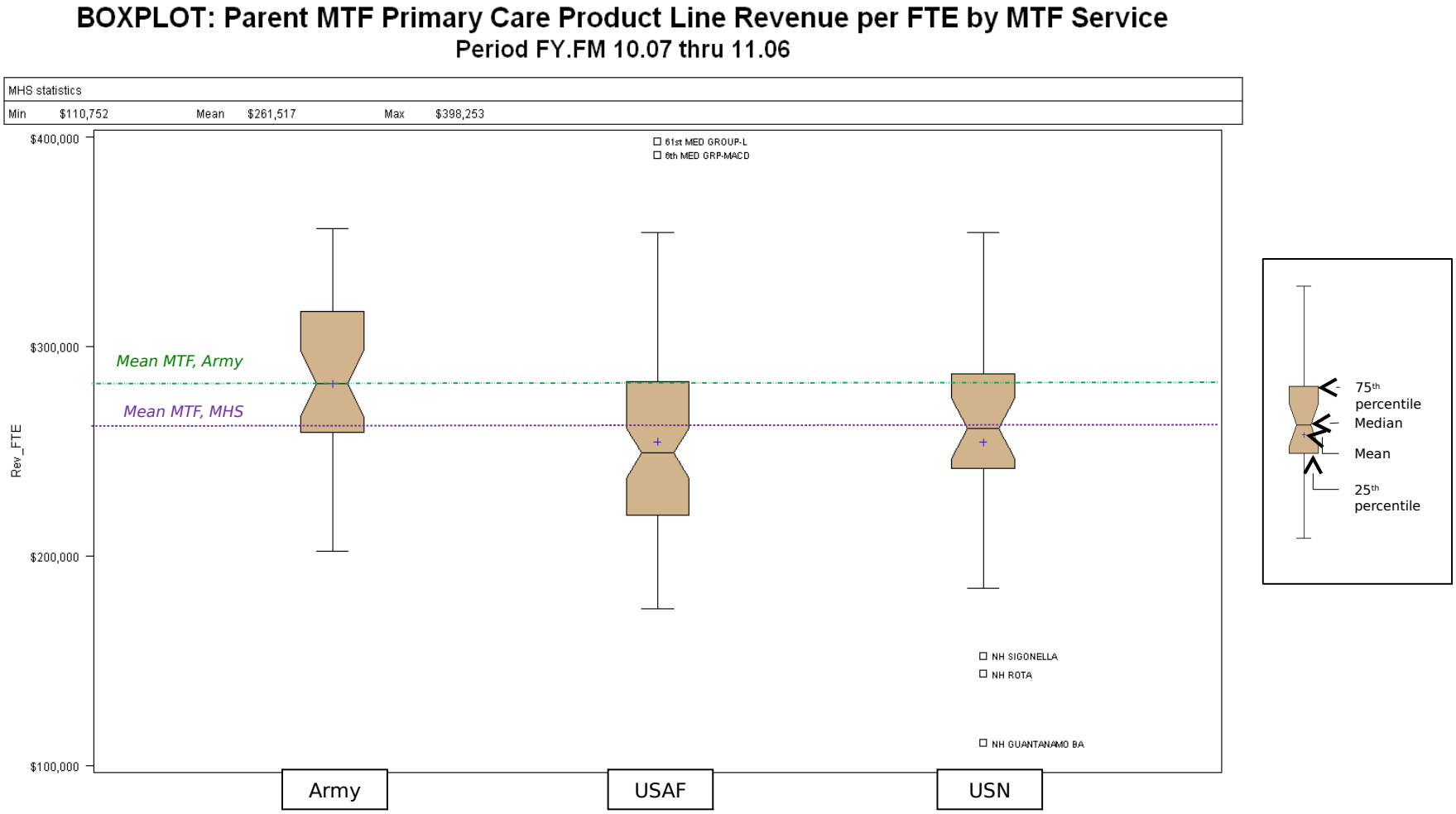
TRUE STORY!

- At a previous HCDP conference… one military provider (61F) had to pulled from the MEDCOM.
- Which MTF had to give up the slot?

- PMRM scores…
  - MTF A: $348 K per Practice FTE
  - MTF B: $158 K per Practice FTE
  - MTF C: $175 K per Practice FTE

- Which MTF had to give up the slot?

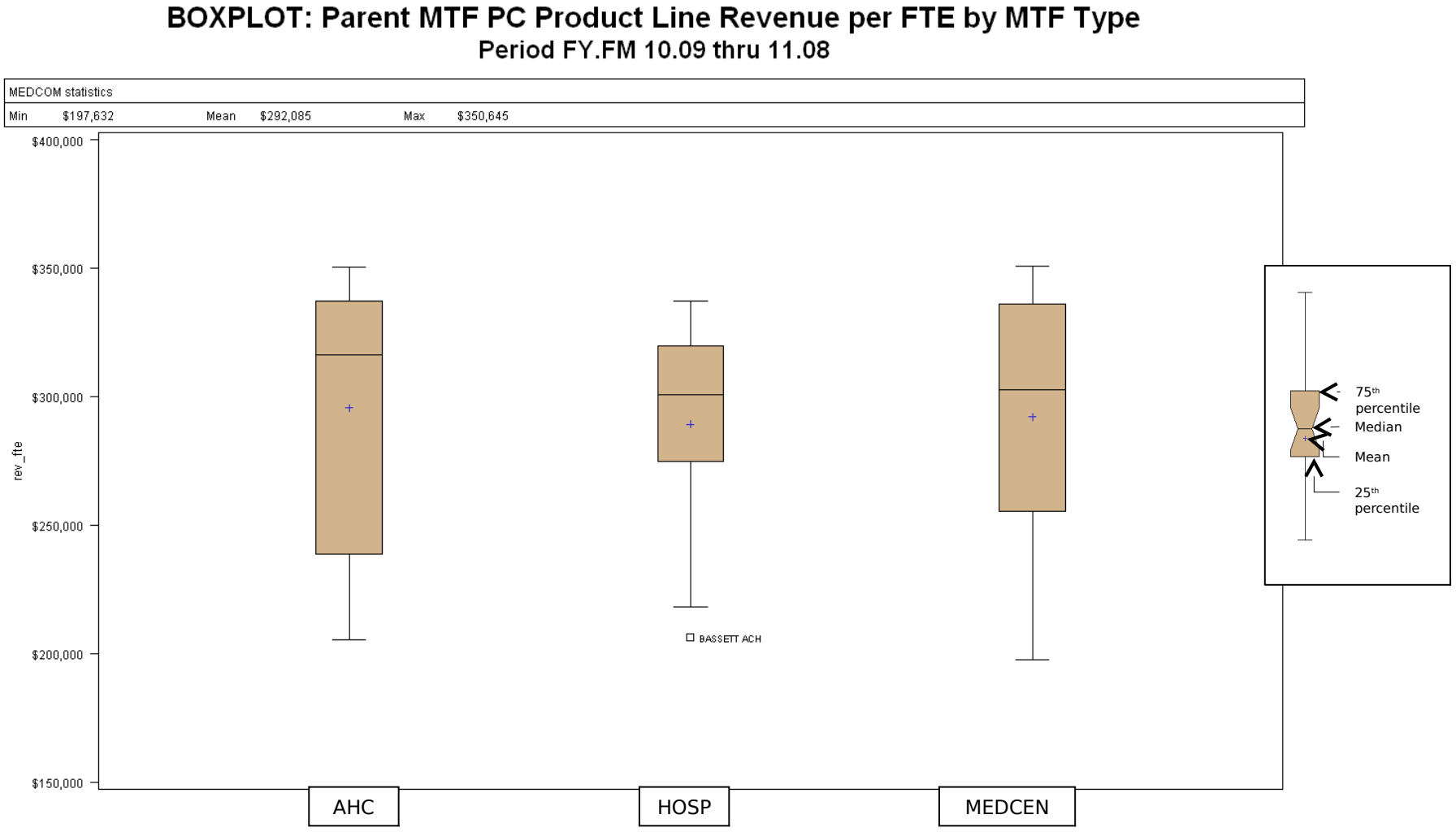
PC PMRM by MTF Service



Primary Care includes Family Practice Physician, Pediatrician, Internal Medicine, Flight Surgeon, Physician Assistant, and Nurse Practitioner providers. (Practice FTEs exclude residents, interns, and students)

Excludes MTFs transferring to JTF CAPMED. (PMRM Version 2)

PC PMRM by MTF Type (Army only)



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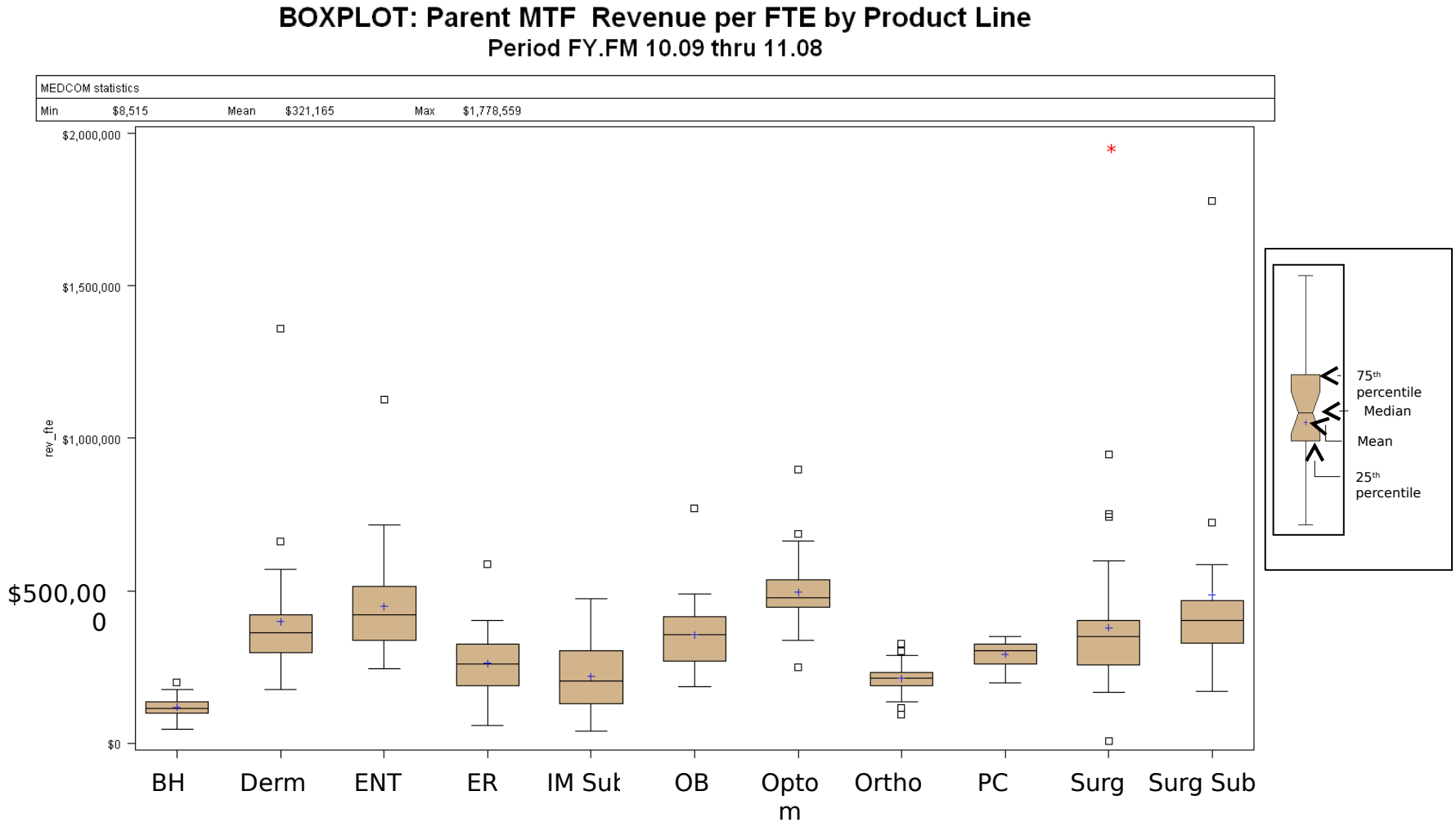
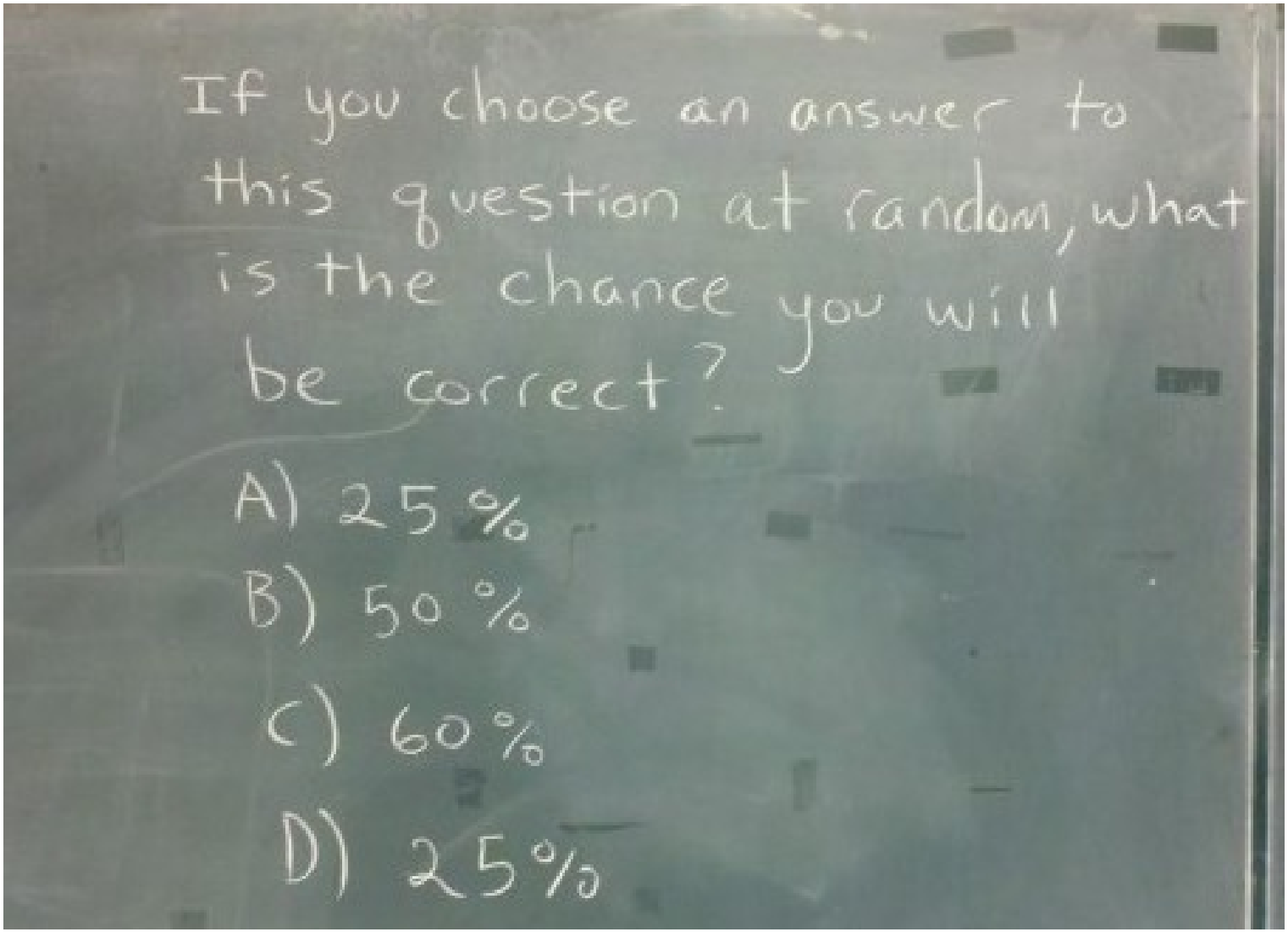
PMRM by Product Line



Excludes MTFs transferring to JTF CAPMED. (PMRM Version 2)

Statistics can be challenging…



ARMY MEDICINE
Bringing Value...Inspiring Trust

Administrative Cost Efficiency (ACE) Metric

"Statistics can be made to prove anything - even the truth…"

Kenneth R. Kovats
MEDCOM PAE

FOUO/UNCLASSIFIED

Description of ACE Metric

- A measure of “Administrative Cost Efficiency”
- Expressed as
  - Ratio of Admin Expenses to Healthcare Value supported
  - Academic score based on performance relative to MTF specific goals.
- Each MTF has its own goals to account for MTF unique factors and economies of scale.

Purpose of ACE

- Focus MEDCOM managerial and leadership effort on Administrative Efficiency
- Why?
  - Healthcare requires substantial administrative support
  - MEDCOM spends more than 38 cents per dollar of healthcare value supported
  - One of the main reasons for the cost differential between the Purchased Care and Direct Care subsystems

The MHS Quadruple Aim

Readiness

Ensuring that the families and individuals that make up the total military force is medically ready to deploy and that the medical force is ready to deliver health care anytime, anywhere in support of the full range of military operations, including humanitarian missions.

Experience of Care

Providing a care experience that is patient- and family-centered, compassionate, convenient, equitable, safe, and always of the highest quality.

Population Health

Reducing the generators of ill health by encouraging healthy behaviors and decreasing the likelihood of illness through focused prevention, chronic care management and the development of increased resilience.

Per Capita Cost

Creating value by focusing on quality, eliminating waste, and reducing unwarranted variation; considering the total cost of care over time, not just the cost of an individual health care activity.

Usage and Relevance

- TSG’s Balanced Scorecard
- Business Plan Guidance
- Business Operations Review and Analysis
- *Biz Bowl Metric*
- MTF Administrative Progress Report

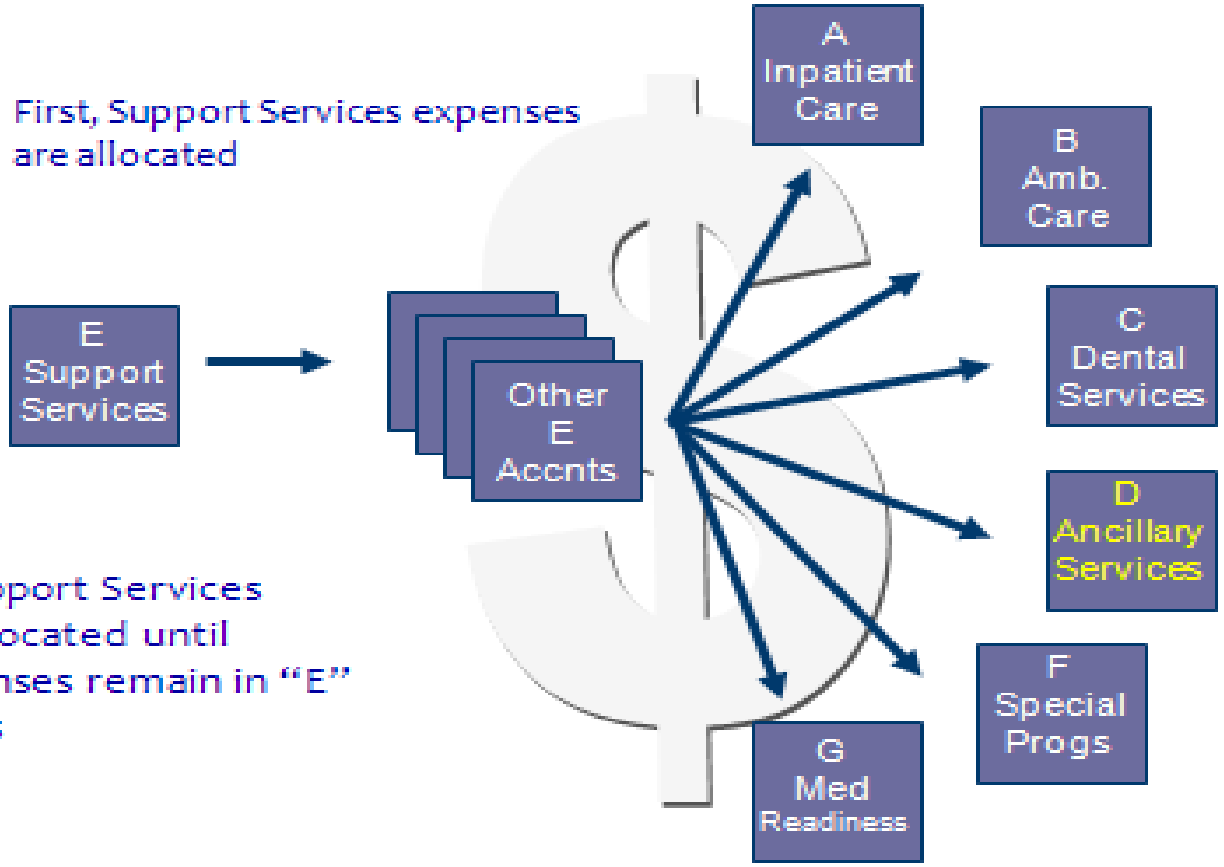
Terms and Concepts

- MEPRS Accounts
  - A: Inpatient
  - B: Ambulatory
  - C: Dental
  - D: Ancillary (DJ = ICU)
  - E: Administration
  - F: Special Programs
  - G: Readiness
- Step down Allocation

Expense Allocations

Expense Allocation

First, Support Services expenses are allocated



Each Support Services FCC is allocated until no expenses remain in "E" accounts

ACE Methodology

EASIV REPOSITORY

ACE EXPENSES

M2 – Direct Care – CAPER
M2 – Direct Care – SIDR

ACE REVENUE

Methodological Overview

- ACE Metric: The proportion of Administrative Costs applicable to the value of healthcare created by Inpatient and ambulatory operations
- Excluded from the expenses are:
  - Depreciation
  - Free Receipts
  - Med-Dental Rx Supplies and Equipment
  - Utilities
  - Construction (EDC/EDD)

Scoring

- For each MTF the metric will be expressed as
  - A **Ratio** e.g. 0.42
  - An **Academic Numeric Score** (0 – 100)
    - Based on a non-linear regression model where achieving the expected value earns a score of 70
    - Score is a component of the MAPR (MTF Admin Progress Report)
  - A **Letter Grade** (A-F)
    - A score greater than or equal to 90
    - B score between 80 and 89
    - C score between 70 and 79
    - D score between 60 and 69

Admin Cost Efficiency in Relation to Revenue Output

- Current Phase

  $\acute{\eta}_{\$ER} = (X_{EA} + X_{EB}) / (R_A + R_B)$

  - $\acute{\eta}_{\$ER}$: Efficiency of E Account Costs with respect to the supported revenue
  - X_{EA} , X_{EB} : Expenses (-) Allocated from the E Account to FCC1 A, B
  - R_A , R_B : Revenue from the FCC1 A, B

Admin Cost Efficiency in Relation to Revenue Output

Planned Evolution:

Next

$$\acute{n}_{\$ER} = (X_{EA} + X_{EB} + X_{ED}) / (R_A + R_B + R_D)$$

Later

$$\acute{n}_{\$ER} = (X_{EA} + X_{EB} + X_{EC} + X_{ED}) / (R_A + R_B + R_c + R_D)$$

Future

$$\acute{n}_{\$ER} = (X_{EA} + X_{EB} + X_{EC} + X_{ED} + X_{EF} + X_{EG}) / (R_A + R_B + R_c + R_D + R_F + R_G)$$

A = Inpatient; B = Ambulatory; C = Dental; D = Ancillary

F = Special Programs; G = Readiness

ACE Expenses vs Total Expenses

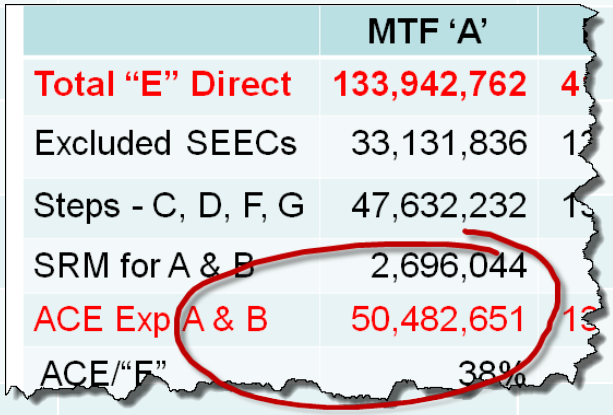
	MTF ‘A’	MTF ‘B’	MTF ‘C’
Total “E” Direct	**133,942,762**	**41,233,508**	**46,627,031**
Excluded SEECs	33,131,836	12,124,920	12,511,232
Steps - C, D, F, G	47,632,232	15,221,895	12,997,087
SRM for A & B	2,696,044	264,059	1,590,589
ACE Exp A & B	50,482,651	13,622,633	19,528,122
ACE/“E”	38%	33%	42%

”What was Bought”
(1 OF 2)

SEEC Description			MTF ‘A’
Borrowed Foreign National Mil Labor			61,613
Borrowed Mil Labor			3,073,704
Civilian PCS travel			138,807
Civilian Personnel Comp			11,862,611
Communication			690,112
Education & Trng			14,029
Foreign National Civ Direct Hire			7,403,622
Fuels			2,554
Info Processing Equip			0
Interest and Dividends			2,062
Lands and Structures			474,895

”What was Bought”
(2 OF 2)

SEEC Description			MTF ‘A’
Other Equipment			1,270,030
Other Misc Cont			401,263
Other Supplies			1,435,558
Printing and Reproduction			34,231
Purchase Maint Equipment			1,884,675
Readiness Labor			1,403,248
Recurring Real Property Maint			2,977,933
Rental Payments			130,993
Reserves Personnel Compensation			1,644,187
Transportation of Things			31,105
Travel and Transportation of Persons			1,299,094



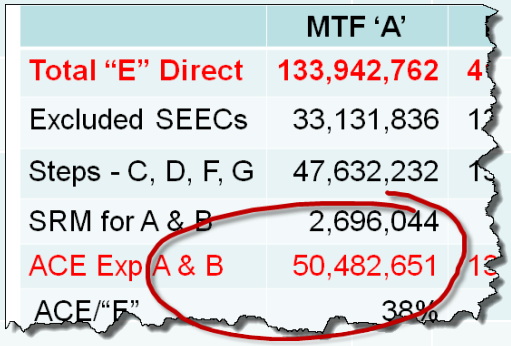
	MTF ‘A’	
Total “E” Direct	133,942,762	4
Excluded SEECs	33,131,836	1
Steps - C, D, F, G	47,632,232	1
SRM for A & B	2,696,044	
ACE Exp A & B	50,482,651	1
ACE/“E”	38%	

“What Was It Bought For”
(1 of 2)

Description			MTF ‘A’	
Administration			7,055,002	
Ambulatory Care Patient Admin			5,239,506	
TRICARE Managed Care Admin			4,880,711	
Clinical Management			10,535,901	
Command			5,826,035	
Inpatient Admin			5,196,625	
Service Medical IM/IT			2,149,673	
Patient Food Operations			3,082,520	
Special Staff			1,954,388	
Education and Training Program Spt			1,218,308	

"What Was It Bought For"
(2 of 2)

Description			MTF 'A'	
Materiel Management Services			1,183,781	
Housekeeping			823,829	
Communications			514,010	
Real Property Management			429,873	
Other Base Support Services			190,295	
Laundry Service			162,986	
Third Party Collection Administration			81,233	
Transportation			34,657	
TOTAL MTF 'A'			**50,482,651**	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Excluded SEECs 33,131,836 1
Steps - C, D, F, G 47,632,232 1
SRM for A & B 2,696,044
ACE Exp A & B 50,482,651 13
ACE/"E" 38%

Bring in the Revenue

	MTF ‘A’	MTF ‘B’	MTF ‘C’
Total “E” Direct	133,942,762	41,233,508	46,627,301
Excluded SEECs	33,131,836	12,124,920	12,511,232
Steps to C, D, F, G	47,632,232	15,221,895	12,997,087
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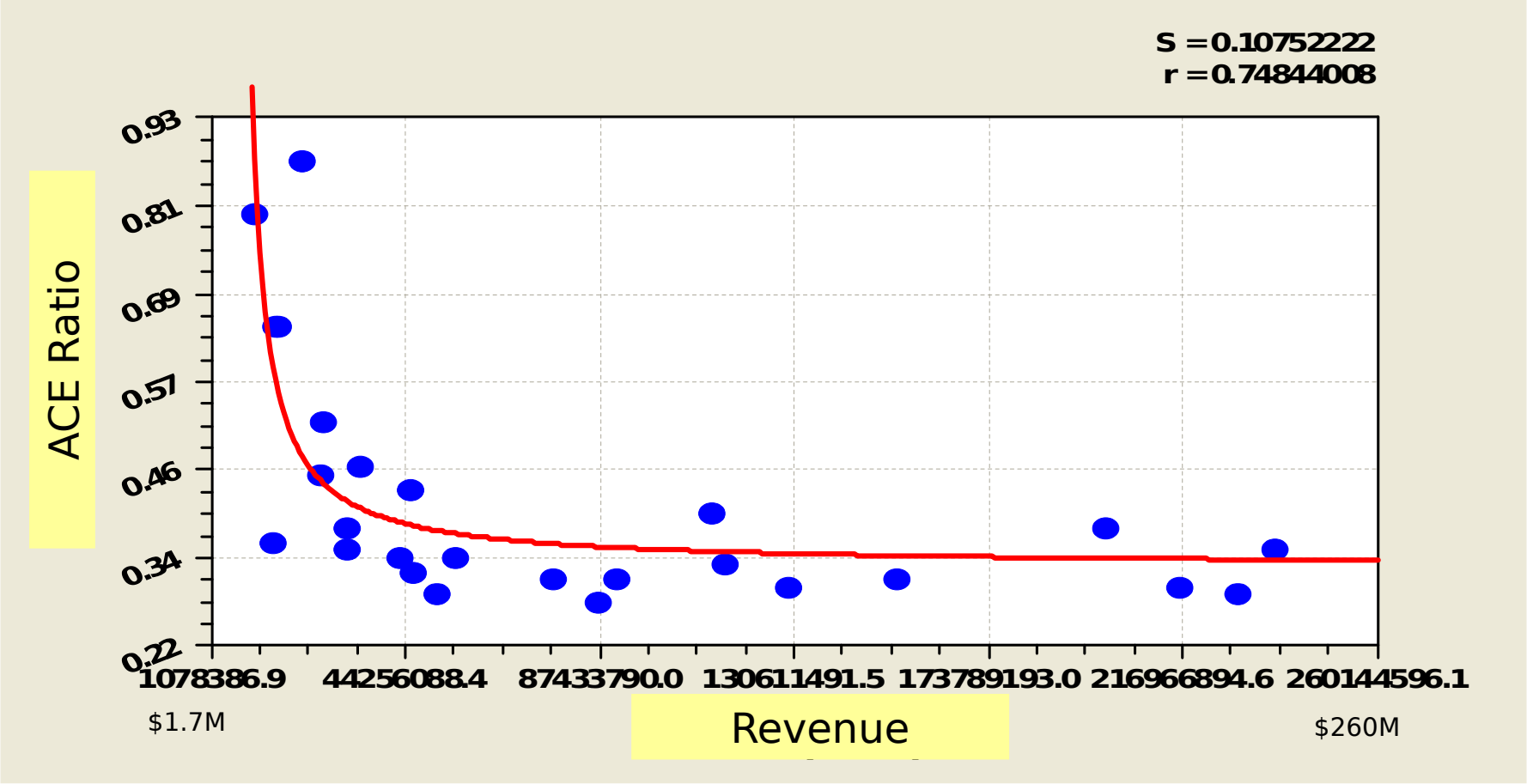
ACE Exp A & B	50,482,651	13,622,633	19,528,122
ACE/“E”	38%	33%	42%
Economic Value	120,978,286	12,514,267	17,430,152
ACE Ratio	0.42	1.09	1.12

ACE Ratio to Revenue

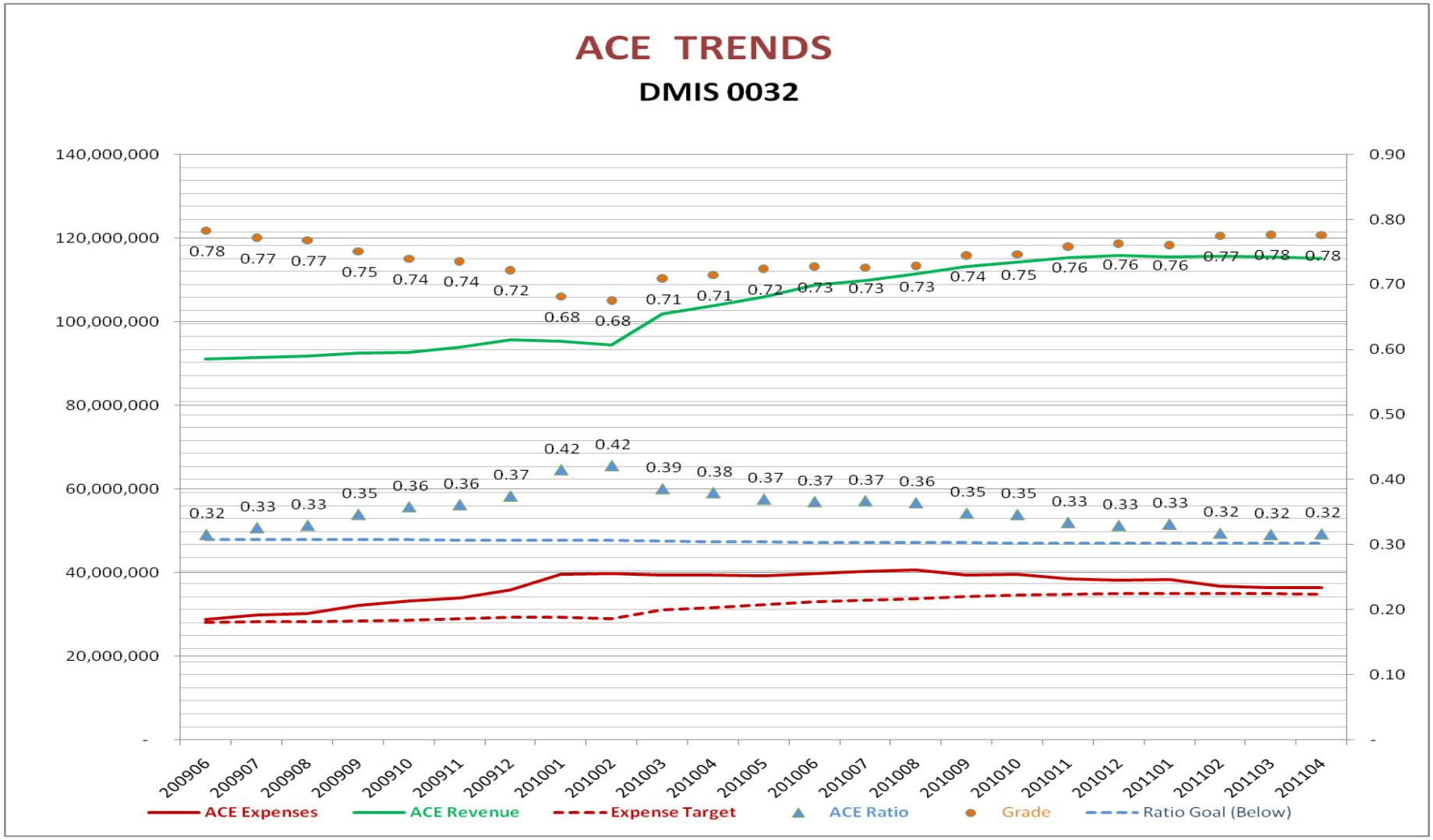


Y Axis : ACE Ratio, X Axis: Revenue
12 month worth of data by Parent DMIS
Below the line is desirable

ACE Ratio/Score

DMIS	Unit	Exp	Rev	Ratio	Goal	Score	Gr
0001	FAHC	5,867,770	5,163,155	1.14	0.97	58	F
0003	LAHC	6,618,393	8,210,080	0.81	0.97	91	A
0005	BACH	13,441,040	33,479,955	0.40	0.40	75	C
0008	RW BAHC	7,408,741	7,778,377	0.95	0.97	77	C
0032	EACH	36,899,841	114,832,543	0.32	0.34	77	C
0047	EAMC	46,192,089	125,213,077	0.37	0.34	72	C
0048	MACH	22,909,228	74,960,652	0.31	0.35	80	B
0049	WACH	23,070,672	60,796,282	0.38	0.36	73	C
0052	TAMC	78,898,745	264,541,994	0.30	0.33	78	C
0057	IACH	18,241,018	49,015,704	0.37	0.37	75	C
0058	MAHC	8,161,102	8,182,380	1.00	0.97	72	C
0060	BACH	29,986,068	98,020,396	0.31	0.35	79	C

ACE Trend Chart



Improving ACE

- Make the numerator smaller
  - Decrease expenses
- Make the denominator larger
  - Increase revenue

Adjusting the Numerator

- Explore Root Cause
  - Improve Accounting Accuracy
  - Data Accuracy - Manpower Accountability
    - No Crazy ‘8s’
  - Stringent Manpower PBAC
    - No Automatic Backfills
  - Review Contract Requirements

Adjusting the Denominator

- Explore Root Cause
  - Improve Workload Documentation
  - Improve Productivity
- Revenue must rise faster than expenses in order to improve the ACE ratio

Conclusion

- ACE Metric
  - is a measure of Administrative Cost Efficiency expressed as a ratio of Admin Expenses to Healthcare Value supported
  - is an academic score based on performance relative to MTF specific goals
  - is unique to each MTF and its goals are adjusted to account for MTF specific factors and economies of scale
  - is dependent on revenues increasing or expenses decreasing in order to improve

ARMY MEDICINE

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